

Memorandum

To: ALL DISTRICT DIVISION CHIEFS
Operations
Project Development

Date: November 28, 1994

File: 3.3.10

From: DEPARTMENT OF TRANSPORTATION
Division of Traffic Operations

Subject: Long-Term Installations of K-Rail

With the current interest within the districts to install low cost concrete median barriers, more districts have opted for long-time installations of K-Rail. Because of the extended life of these installations, it is necessary that they be installed according to higher standards than temporary ones. For long-term installations, where the barrier is expected to exist for more than 5 years, the traffic reviewers will concur with K-Rail use and the following design details shall be incorporated in the design:

- 1) The K-Rail elements or sections meet current California Department of Transportation's design with the latest pin connections;
- 2) All elements shall be pinned together to act as a single unit;
- 3) The elements are restrained against lateral movement by either:
 - a) 1.0 meters (m) of minimum 24 millimeters (mm) diameter steel stakes, 4 per element driven so as to restrain the element but not to interfere with the smooth side of the element or
 - b) a 38 mm x 1.2 m asphalt concrete (AC) pad against the base at each side;
- 4) The barrier will sit on a minimum 1.2 m x 50 mm thick AC pad or 1.2 m x 150 mm thick pad of compacted, Type 3 or better, base materials.

These criteria should be followed when using K-Rail in a long-term design to minimize maintenance efforts. As always, drainage and maintenance should be consulted during the median barrier planning and design. Should you have any questions about the barrier installation, please call Mr. JD Bamfield at (916) 654-5872 or CALNET 8-464-5872.



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Division of Traffic Operations